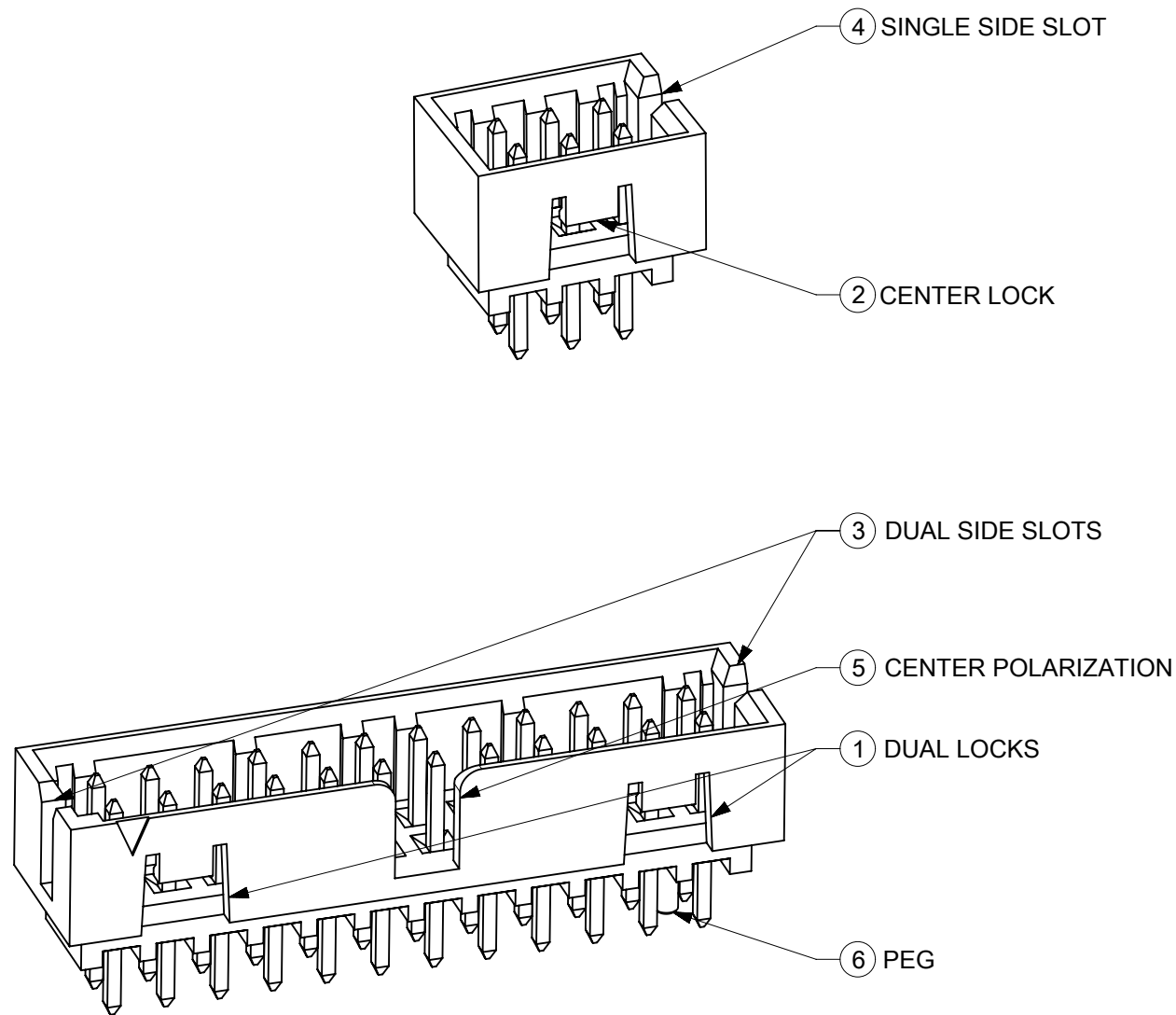


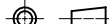
FEATURES SELECTION GUIDE



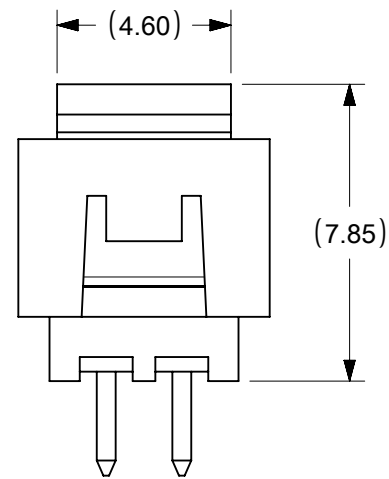
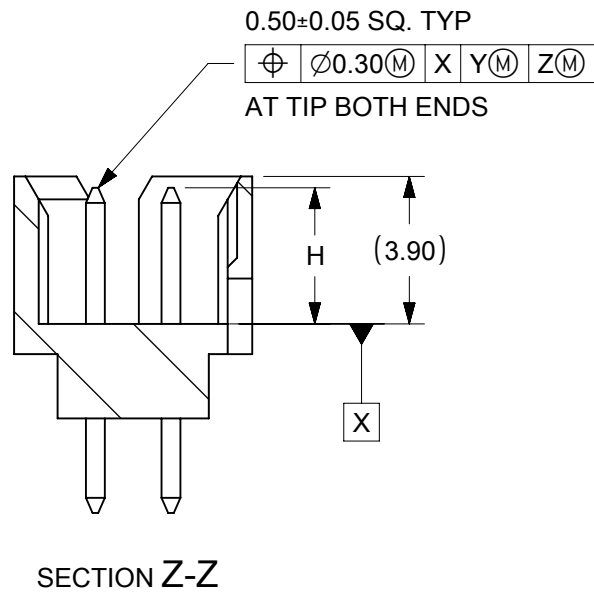
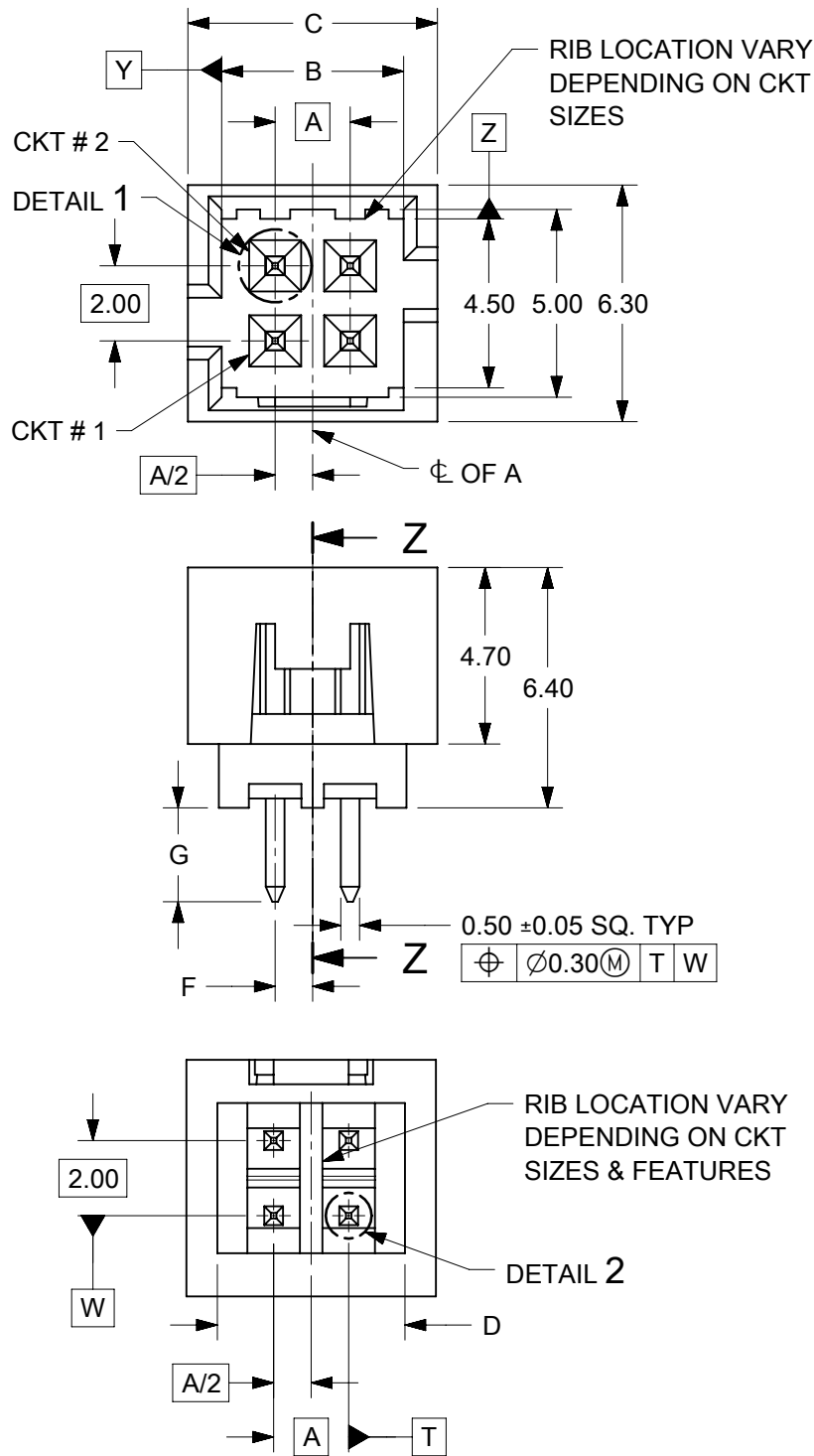
PACKAGING SPECIFICATION TABLE

TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR: 87831-0419 87831-0645 87831-5141 87831-5119 87831-0443 87831-1011 87831-5241 87831-1420 87831-5242 87831-0643	PK-87831-002

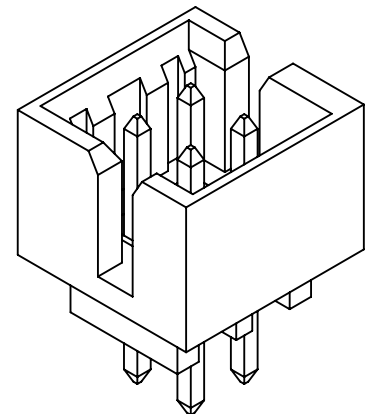
FEATURES							
CIRCUIT SIZE	FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
	① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	N.A	YES	N.A	N.A	
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5
	N.A	N.A	YES	N.A	N.A	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	YES	
	N.A	YES	N.A	YES	N.A	N.A	
	N.A	YES	N.A	YES	N.A	YES	
	N.A	N.A	YES	N.A	YES	N.A	
8 TO 12	N.A	N.A	YES	N.A	YES	N.A	6 - 8
	N.A	N.A	YES	N.A	YES	YES	
	N.A	YES	YES	N.A	N.A	N.A	
	N.A	YES	YES	N.A	N.A	YES	
	N.A	YES	N.A	YES	N.A	N.A	
	N.A	YES	N.A	YES	N.A	YES	
14 TO 50	YES	N.A	YES	N.A	YES	N.A	9 - 13
	YES	N.A	YES	N.A	YES	YES	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex							
mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)								MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER							
	MM	INCH						PRODUCT CUSTOMER DRAWING							
4 PLACES	±		±	DOCUMENT NUMBER SD-87831-0001									DOC TYPE PSD		DOC PART 001
3 PLACES	±		±												
2 PLACES	±	0.2	±												
1 PLACE	±		±												
0 PLACES	±		±	EC NO: 761863				2023/08/14							
DRWN: SUAIFR															
CHK'D: GGA				2023/09/11											
APPR: GGA				2023/09/11											
INITIAL REVISION:				2015/04/15				2015/06/29							
DRWN: GMENARLY															
APPR: KHLIM															
ANGULAR TOL ± 3.0 °				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		1 OF 14	

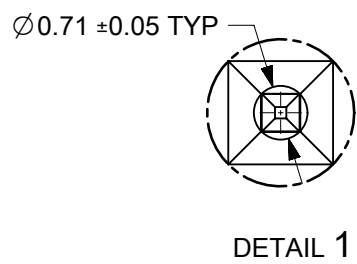
4 CIRCUITS



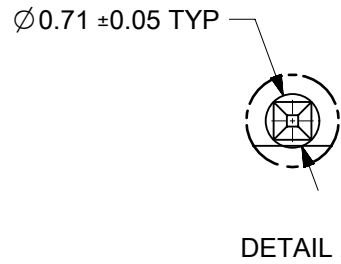
VIEW FOR
HEADER WITH CAP



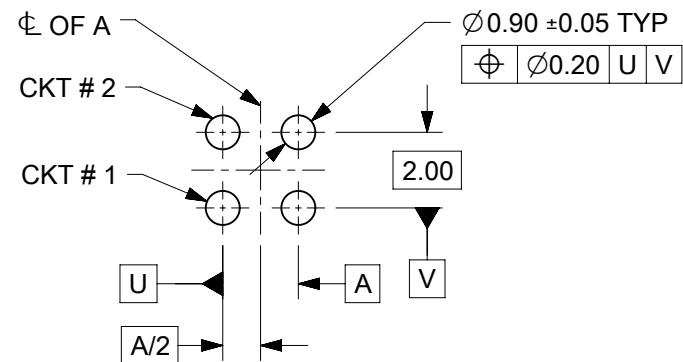
VIEW FOR HEADER
WITH ONLY DUAL SLOTS



DETAIL 1



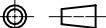
DETAIL 2

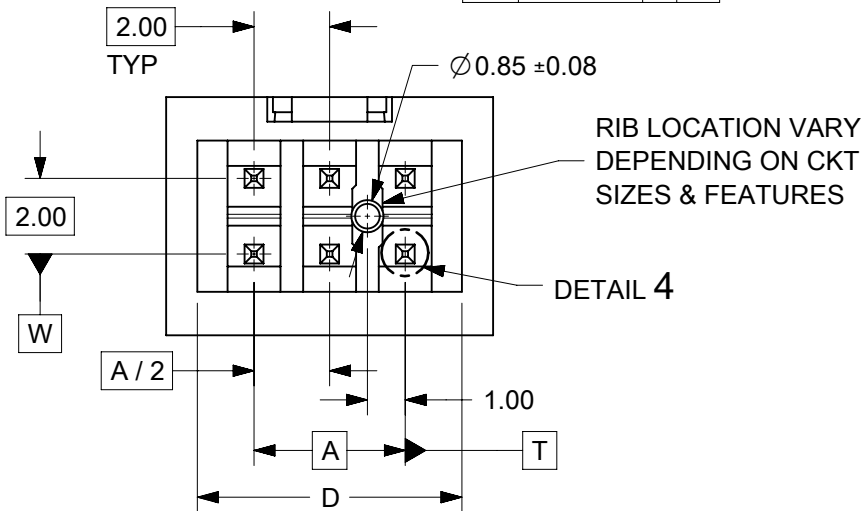
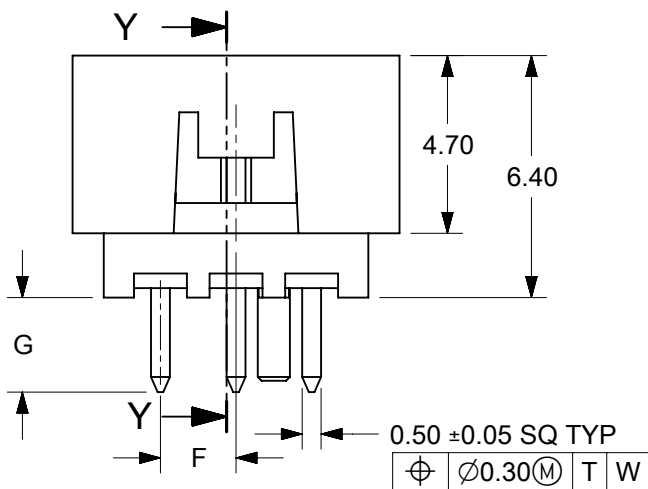
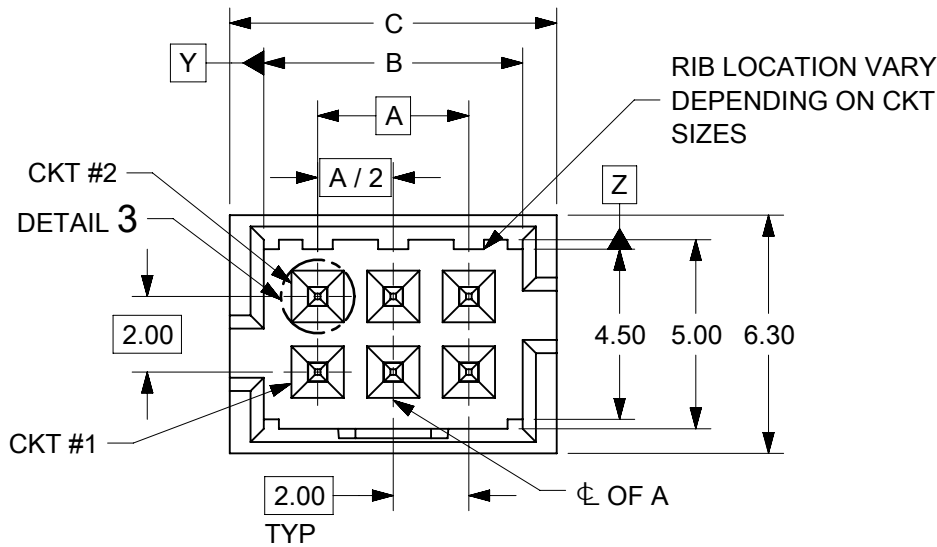


RECOMMENDED PCB LAYOUT

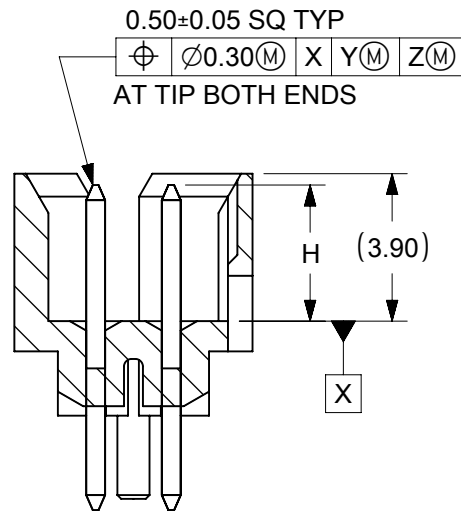
NOTES:

1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE
2. FINISHES: REFER TO PLATING OPTIONS
3. PRODUCT SPECIFICATION: PS-87831-027
4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES
AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE:
79107 (GOLD PLATED), 78787 (TIN PLATED)

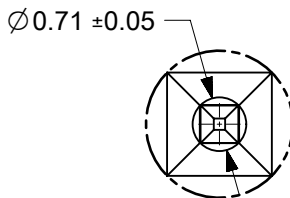
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.			molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
mm	NTS										
GENERAL TOLERANCES (UNLESS SPECIFIED)											
	MM	INCH									
4 PLACES	±	±	EC NO: 761863 DRWN: SUAIFR 2023/08/14 CHK'D: GGA 2023/09/11 APPR: GGA 2023/09/11			PRODUCT CUSTOMER DRAWING					
3 PLACES	±	±									
2 PLACES	± 0.2	±									
1 PLACE	±	±									
0 PLACES	±	±	INITIAL REVISION: DRWN: GKMENARLY 2015/04/15 APPR: KHLIM 2015/06/29			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
ANGULAR TOL ± 3.0 °		SD-87831-0001				PSD	001	A24			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
					A3-SIZE	87831	SEE TABLE		GENERAL MARKET		2 OF 14



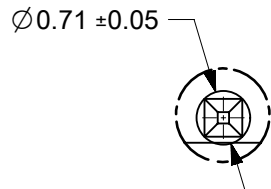
6 CIRCUITS



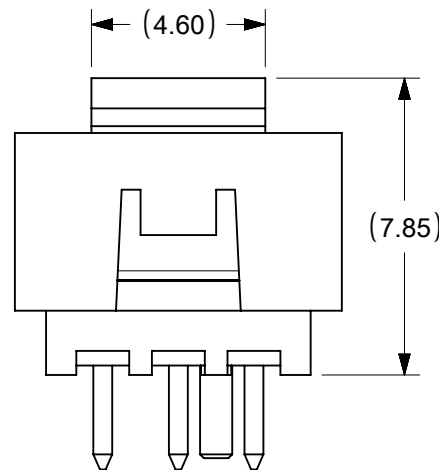
SECTION Y-Y



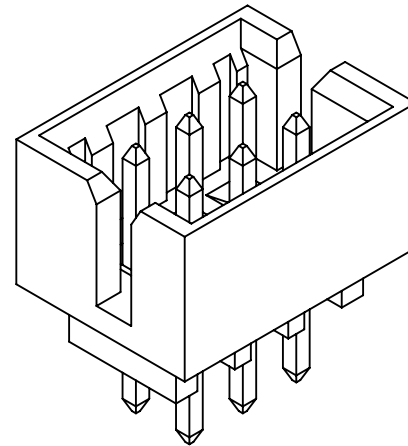
DETAIL 3



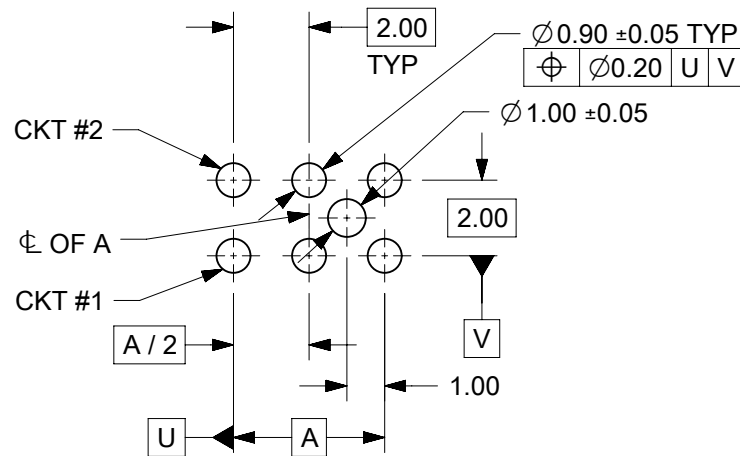
DETAIL 4



VIEW FOR
HEADER WITH CAP



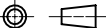
VIEW FOR HEADER WITH
ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

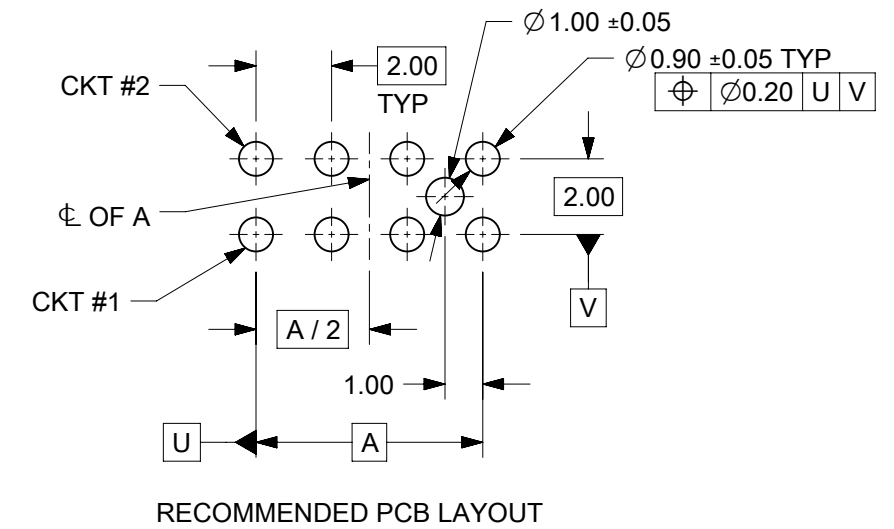
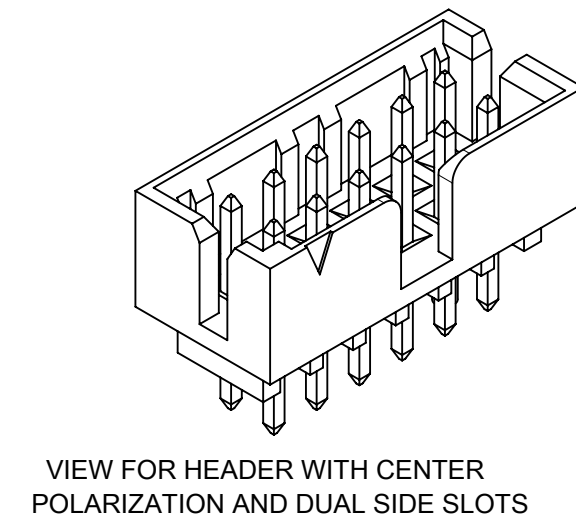
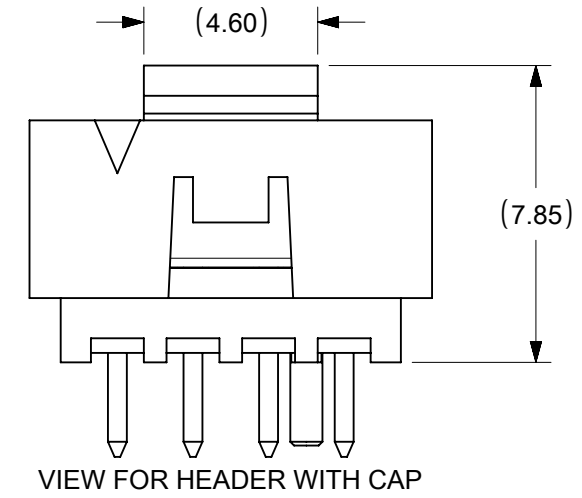
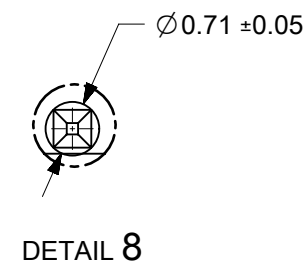
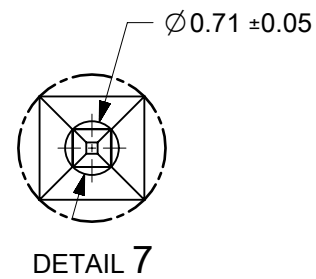
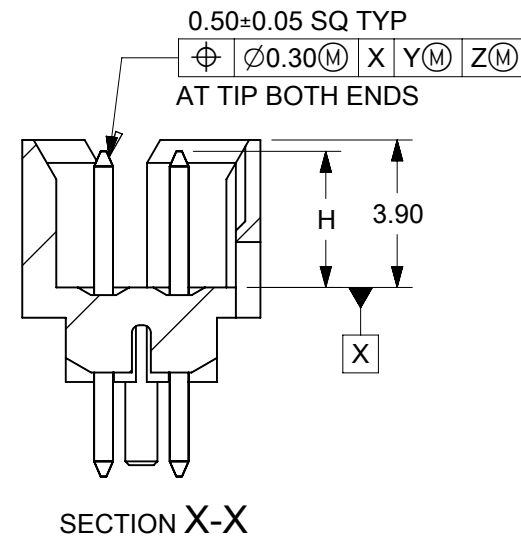
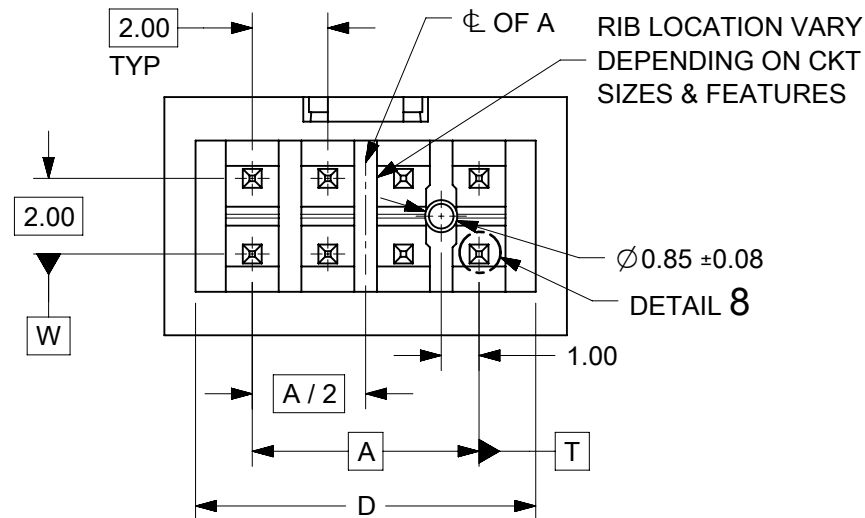
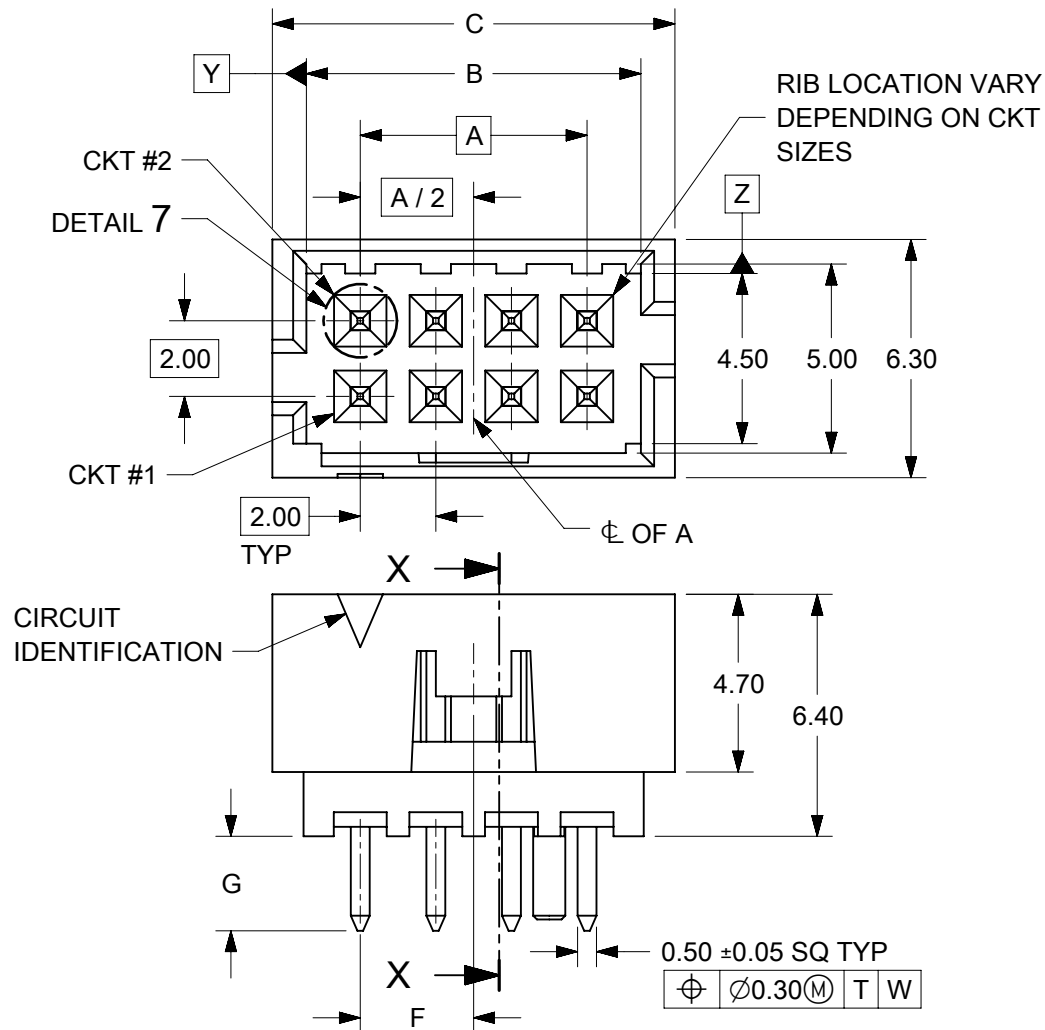
NOTES:

- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.			molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER						
mm		NTS											
GENERAL TOLERANCES (UNLESS SPECIFIED)													
										MM	INCH		
4 PLACES	±		±	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11			PRODUCT CUSTOMER DRAWING						
3 PLACES	±		±										
2 PLACES	±	0.2	±										
1 PLACE	±		±	INITIAL REVISION: DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION		
0 PLACES	±		±				SD-87831-0001		PSD	001	A24		
ANGULAR TOL ± 3.0 °													
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE	87831	SEE TABLE		GENERAL MARKET		4 OF 14	

10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
6 CIRCUITS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B	A	F	E	D	C	B

8 TO 12 CIRCUITS



NOTES:

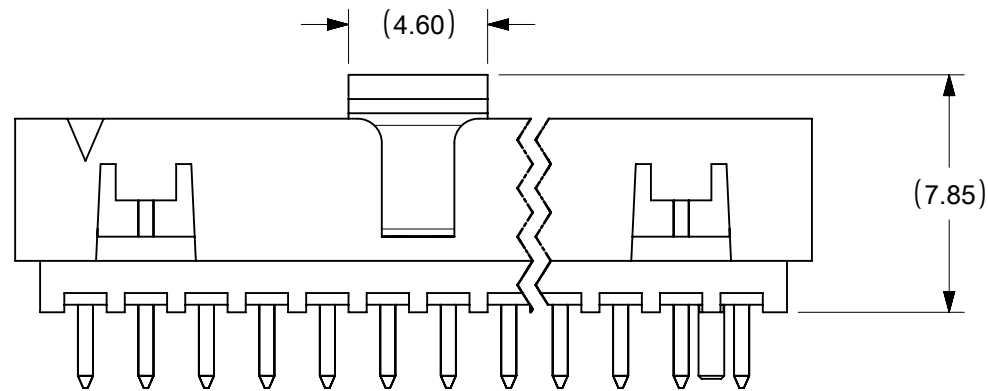
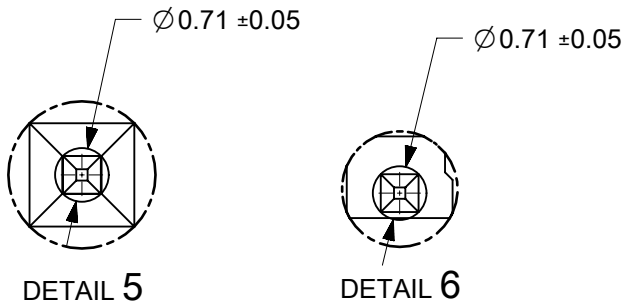
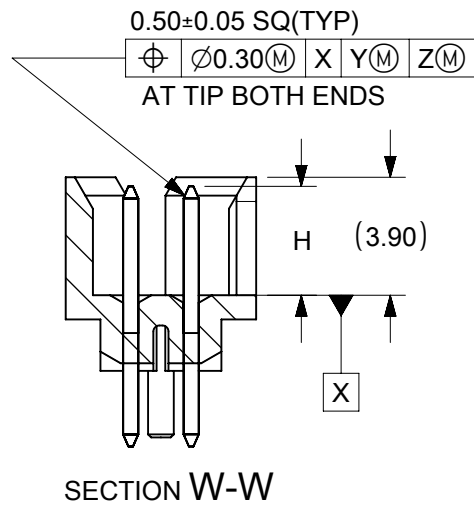
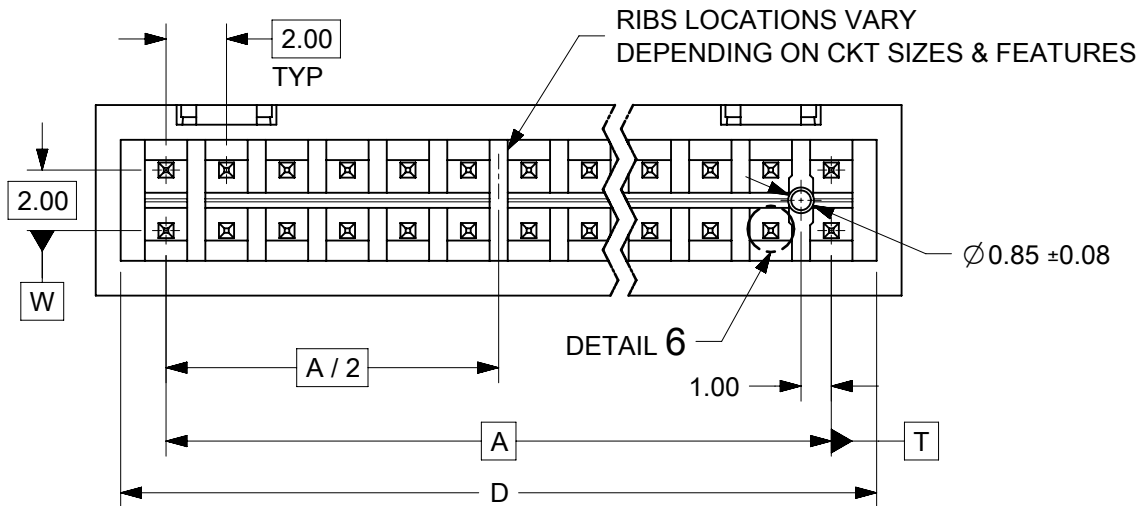
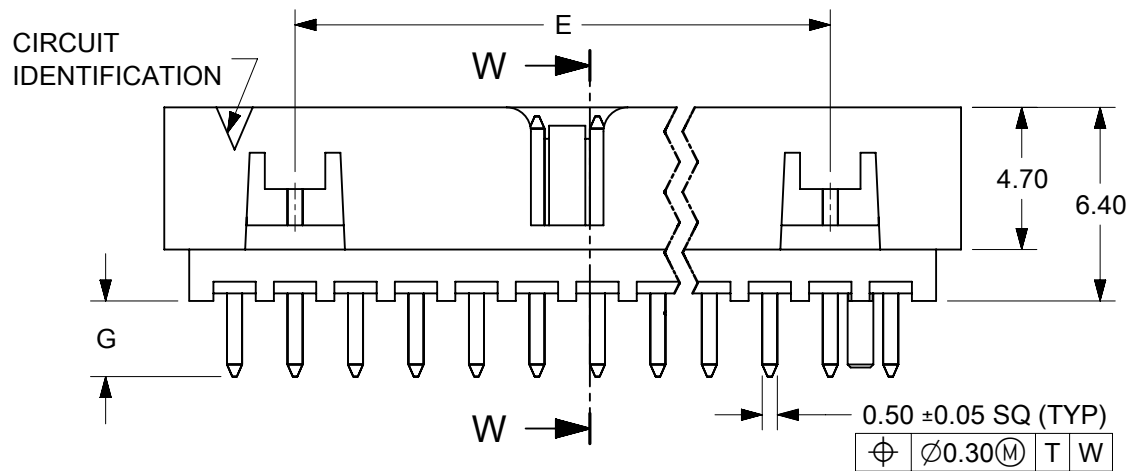
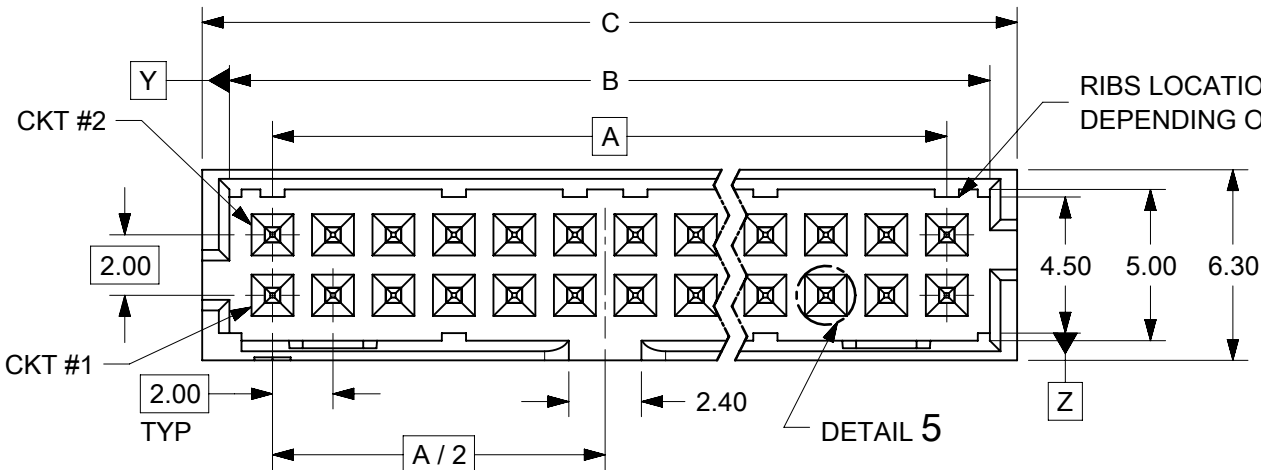
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex							
mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER											
	MM	INCH													
4 PLACES	±		±	EC NO: 761863 DRWN: SUAIFR 2023/08/14 CHK'D: GGA 2023/09/11 APPR: GGA 2023/09/11											
3 PLACES	±		±												
2 PLACES	±	0.2	±												
1 PLACE	±		±												
0 PLACES	±		±	INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29											
ANGULAR TOL ± 3.0 °															
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		6 OF 14	

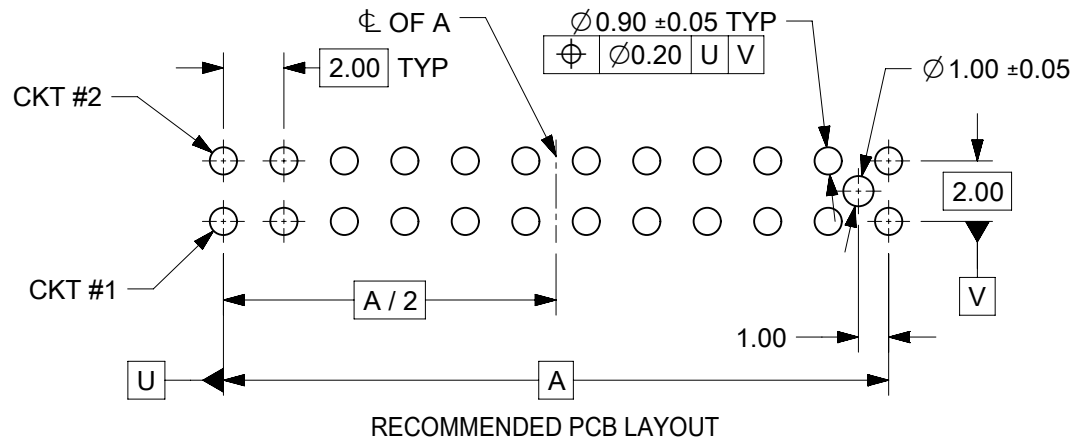
DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
-----------------	----	--------------	------------	----------

10	9	8	7	6	5	4	3	2	1																
10 TO 12 CIRCUITS																									
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTE R POLARI ZATION	PEG	DIMENSION													
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
10	87831-1019	N.A	N.A		1	N.A	N.A	YES	N.A	YES	N.A	8.00	10.85	12.65	11.00	N.A	N.A	2.50	3.60±0.20						
	87831-1020	N.A	87831-1070		2																				
	87831-1021	N.A	87831-5562		3																				
	87831-1036	N.A	N.A		4																				
	87831-1010	N.A	87831-5561		2	N.A	N.A	YES	N.A	YES	N.A							3.50							
	87831-1011	N.A	N.A		3																				
	87831-1028	N.A	N.A		2																				
	87831-1029	N.A	87831-5557		3	N.A	N.A	YES	N.A	YES	YES									3.50					
	87831-1035	N.A	N.A		3																				
	87831-1041	N.A	N.A		2												N.A	YES			YES	N.A	N.A	2.50	
	87831-1042	N.A	87831-5553		3																				
	87831-1032	N.A	N.A		2	N.A	YES	YES	N.A	N.A	2.50														
	87831-1043	N.A	N.A		2												N.A	YES		N.A	YES	N.A	N.A		
	87831-1044	N.A	N.A		3																				
	87831-1045	N.A	N.A		2	N.A	YES	N.A	YES	N.A														YES	2.50
	87831-1046	N.A	N.A		3																				
12	87831-1219	N.A	N.A		1	N.A	N.A	YES	N.A	YES	N.A	10.00	12.85	14.65	13.00	N.A	N.A	2.50	3.60±0.20						
	87831-1220	N.A	87831-5556		2																				
	87831-1221	N.A	N.A		3																				
	87831-1236	N.A	N.A		4																				
	87831-1228	N.A	N.A		2	N.A	N.A	YES	N.A	YES	YES						2.50								
	87831-1229	N.A	87831-5558		3																				
	87831-1258	N.A	87831-5567		2													N.A		YES	YES	N.A	N.A	3.50	
	87831-1241	N.A	N.A		2	N.A	YES	YES	N.A	N.A	2.50														
	87831-1242	N.A	N.A		3												N.A								YES
	87831-1255	87831-1256	N.A		2													N.A		YES	YES	N.A	N.A		
	87831-1232	N.A	N.A		2	N.A	YES	N.A	YES	N.A														N.A	
	87831-1243	N.A	N.A		2						N.A						YES								N.A
	87831-1244	N.A	N.A		3													N.A		YES	N.A	YES	N.A		
	87831-1245	N.A	N.A		2	N.A	YES	N.A	YES	N.A															
	87831-1246	N.A	N.A		3																				
	PLATING OPTIONS:																								
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																									
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																									
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																									
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																									
</																									

14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.			molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER					
mm		NTS										
GENERAL TOLERANCES (UNLESS SPECIFIED)												
	MM		INCH									
4 PLACES		±		±		EC NO: 761863 DRWN: SUAIFR 2023/08/14 CHK'D: GGA 2023/09/11 APPR: GGA 2023/09/11	PRODUCT CUSTOMER DRAWING					
3 PLACES		±		±								
2 PLACES		±	0.2	±								
1 PLACE		±		±								
0 PLACES		±		±		INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29	DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
ANGULAR TOL		±		3.0 °			SD-87831-0001		PSD	001	A24	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
						A3-SIZE	87831	SEE TABLE		GENERAL MARKET		9 OF 14

DOCUMENT STATUS	P1	RELEASE DATE	2023/09/11	04:36:51
-----------------	----	--------------	------------	----------

10		9		8		7		6		5		4		3		2		1	
22 TO 30 CIRCUITS																			
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
22	87831-2219	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	20.00	22.85	24.65	23.00	16.00	N.A	2.50	3.60±0.20
	87831-2220	N.A	N.A	N.A	2														
	87831-2221	N.A	N.A	N.A	3														
	87831-2236	N.A	N.A	N.A	4														
	87831-2228	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2229	N.A	N.A	N.A	3														
24	87831-2419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	22.00	24.85	26.65	25.00	18.00	N.A	2.50	3.60±0.20
	87831-2420	N.A	N.A	87831-7420	2														
	87831-2421	N.A	N.A	N.A	3														
	87831-2436	N.A	N.A	N.A	4														
	87831-2428	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2429	N.A	N.A	N.A	3														
	87831-2435	N.A	N.A	N.A	3														
	87831-2445	N.A	N.A	N.A	3														
	87831-2410	N.A	N.A	N.A	2													YES	
26	87831-2619	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	24.00	26.85	28.65	27.00	20.00	N.A	2.50	3.60±0.20
	87831-2620	87831-2630	87831-5555	N.A	2														
	87831-2621	N.A	N.A	N.A	3														
	87831-2636	N.A	N.A	N.A	4														
	87831-2628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2629	N.A	N.A	N.A	3														
	87831-2610	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50	
28	87831-2819	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	26.00	28.85	30.65	29.00	22.00	N.A	2.50	3.60±0.20
	87831-2820	N.A	N.A	N.A	2														
	87831-2821	N.A	N.A	N.A	3														
	87831-2836	N.A	N.A	N.A	4														
	87831-2828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-2829	N.A	N.A	N.A	3														
30	87831-3019	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	28.00	30.85	32.65	31.00	24.00	N.A	2.50	3.60±0.20
	87831-3020	N.A	N.A	N.A	2														
	87831-3021	N.A	N.A	N.A	3														
	87831-3036	N.A	N.A	N.A	4														
	87831-3028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
	87831-3029	N.A	N.A	N.A	3														
	87831-3035	N.A	N.A	N.A	3														
	87831-3037	N.A	N.A	N.A	3														
	87831-3010	87831-3030	87831-3050	N.A	2													YES	
PLATING OPTIONS:																			
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																			
DOCUMENT STATUS		P1	RELEASE DATE	2023/09/11	04:36:51	7		6		5		4		3		2		1	
FORMAT: Mol-lega-master-db-prod-A3 REVISION: E1 DATE: 2021/05/01		9		8		7		6		5		4		3		2		1	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	±	±
3 PLACES	±	±
2 PLACES	± 0.2	±
1 PLACE	±	±
0 PLACES	±	±
ANGULAR TOL	± 3.0 °	

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

A3-SIZE

SERIES

87831

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

11 OF 14

EC NO: 761863
DRWN: SUAIFR
CHK'D: GGA
APPR: GGA

2023/08/14
2023/09/11
2023/09/11

INITIAL REVISION:
DRWN: GMENARLY
APPR: KHLIM

2015/04/15
2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

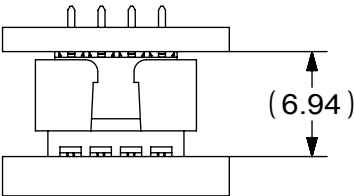
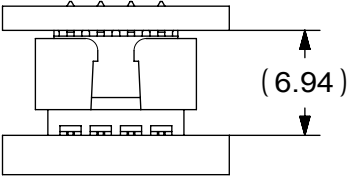
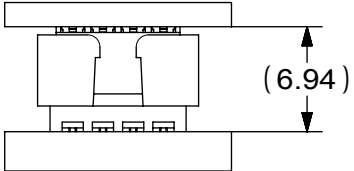
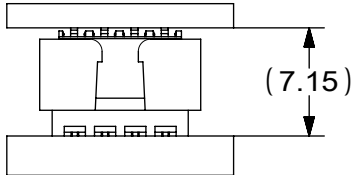
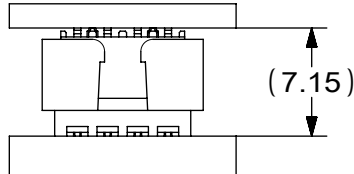
REVISION

A24

10		9		8		7		6		5		4		3		2		1																																																																							
32 TO 40 CIRCUITS																																																																																									
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION																																																																													
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H																																																																						
	32	87831-3219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	30.00	32.85	34.65	33.00	26.00	N.A	2.50	3.60±0.20																																																																						
		87831-3220	N.A	N.A	2																																																																																				
		87831-3221	N.A	N.A	3																																																																																				
		87831-3236	N.A	N.A	4																																																																																				
		87831-3228	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																																																																							
87831-3229	N.A	N.A	3																																																																																						
E	34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20																																																																						
		87831-3420	N.A	N.A	2																																																																																				
		87831-3421	N.A	N.A	3																																																																																				
		87831-3436	N.A	N.A	4																																																																																				
		87831-3428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																																																																							
		87831-3429	N.A	N.A	3																																																																																				
		87831-3435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50																																																																							
D	36	87831-3619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20																																																																						
		87831-3620	N.A	87831-5564	2																																																																																				
		87831-3621	N.A	N.A	3																																																																																				
		87831-3636	N.A	N.A	4																																																																																				
		87831-3628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																																																																							
		87831-3629	N.A	N.A	3																																																																																				
	C	38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A	YES							N.A		36.00	38.85	40.65	39.00	32.00	N.A	2.50	3.60±0.20																																																														
87831-3820			N.A	N.A	2																																																																																				
87831-3821			N.A	N.A	3																																																																																				
87831-3836			N.A	N.A	4																																																																																				
87831-3828			N.A	N.A	2	YES	N.A	YES	N.A	YES	YES	2.50																																																																													
87831-3829			N.A	N.A	3																																																																																				
B		40	87831-4019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	38.00	40.85	42.65	41.00	34.00	N.A	2.50							3.60±0.20																																																															
	87831-4020		N.A	N.A	2																																																																																				
	87831-4021		N.A	N.A	3																																																																																				
	87831-4036		N.A	N.A	4																																																																																				
	87831-4028		N.A	N.A	2	YES	N.A	YES	N.A	YES	YES	2.50																																																																													
	87831-4029		N.A	N.A	3																																																																																				
	87831-4010		N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A	3.50																																																																													
PLATING OPTIONS:																																																																																									
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																									
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																									
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																									
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																																																																																									
DOCUMENT STATUS		P1	RELEASE DATE	2023/09/11	04:36:51	7		6		5		4		3		2		1																																																																							
FORMAT: Met-lega-master-ib-prod-A3 REVISION: E1 DATE: 2021/05/01		9		8		7		6		5		4		3		2		1																																																																							
<table><tr><td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr><tr><td>DIMENSION UNITS</td><td>SCALE</td><td colspan="2" rowspan="3">CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.</td><td colspan="2" rowspan="3"> molex </td></tr><tr><td>mm</td><td>NTS</td></tr><tr><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td></tr><tr><td></td><td>MM</td><td>INCH</td><td colspan="2" rowspan="5">EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11</td><td colspan="2" rowspan="5">MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER</td></tr><tr><td>4 PLACES</td><td>±</td><td>±</td></tr><tr><td>3 PLACES</td><td>±</td><td>±</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>±</td></tr><tr><td>1 PLACE</td><td>±</td><td>±</td></tr><tr><td>0 PLACES</td><td>±</td><td>±</td><td colspan="2">INITIAL REVISION:</td><td colspan="2">DOCUMENT NUMBER</td><td>DOC TYPE</td><td>DOC PART</td><td>REVISION</td></tr><tr><td colspan="2">ANGULAR TOL ± 3.0 °</td><td colspan="2">DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29</td><td colspan="2">SD-87831-0001</td><td>PSD</td><td>001</td><td>A24</td></tr><tr><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td>THIRD ANGLE PROJECTION</td><td>DRAWING</td><td>SERIES</td><td>MATERIAL NUMBER</td><td colspan="2">CUSTOMER</td><td colspan="2">SHEET NUMBER</td></tr><tr><td colspan="2"></td><td></td><td>A3-SIZE</td><td>87831</td><td>SEE TABLE</td><td colspan="2">GENERAL MARKET</td><td colspan="2">12 OF 14</td></tr></table>																				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS	SCALE	CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.		molex		mm	NTS	GENERAL TOLERANCES (UNLESS SPECIFIED)			MM	INCH	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER		4 PLACES	±	±	3 PLACES	±	±	2 PLACES	± 0.2	±	1 PLACE	±	±	0 PLACES	±	±	INITIAL REVISION:		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	ANGULAR TOL ± 3.0 °		DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29		SD-87831-0001		PSD	001	A24	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER					A3-SIZE	87831	SEE TABLE	GENERAL MARKET		12 OF 14	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																																																																									
DIMENSION UNITS	SCALE	CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.		molex																																																																																					
mm	NTS																																																																																								
GENERAL TOLERANCES (UNLESS SPECIFIED)																																																																																									
	MM	INCH	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11		MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER																																																																																				
4 PLACES	±	±																																																																																							
3 PLACES	±	±																																																																																							
2 PLACES	± 0.2	±																																																																																							
1 PLACE	±	±																																																																																							
0 PLACES	±	±	INITIAL REVISION:		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION																																																																																
ANGULAR TOL ± 3.0 °		DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29		SD-87831-0001		PSD	001	A24																																																																																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER																																																																																	
			A3-SIZE	87831	SEE TABLE	GENERAL MARKET		12 OF 14																																																																																	

10		9		8		7		6		5		4		3		2		1		
42 TO 50 CIRCUITS																				
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATI ON	PEG	DIMENSION							
							DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
	42	87831-4219	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	40.00	42.85	44.65	43.00	36.00	N.A	2.50	3.60±0.20
		87831-4220	N.A	N.A	87831-4230	2														
		87831-4221	N.A	N.A	N.A	3														
		87831-4236	N.A	N.A	N.A	4														
		87831-4228	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
87831-4229	N.A	N.A	N.A	3																
E	44	87831-4419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	42.00	44.85	46.65	45.00	38.00	N.A	2.50	3.60±0.20
		87831-4420	N.A	N.A	N.A	2														
		87831-4421	N.A	N.A	N.A	3														
		87831-4436	N.A	N.A	N.A	4														
		87831-4428	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
		87831-4429	N.A	N.A	N.A	3														
	87831-4435	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	3.50								
D	46	87831-4619	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	44.00	46.85	48.65	47.00	40.00	N.A	2.50	3.60±0.20
		87831-4620	N.A	N.A	N.A	2														
		87831-4621	N.A	N.A	N.A	3														
		87831-4636	N.A	N.A	N.A	4														
		87831-4628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
		87831-4629	N.A	N.A	N.A	3														
	C	48	87831-4819	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	46.00	48.85	50.65	49.00	42.00	N.A	2.50
87831-4820			N.A	N.A	N.A	2														
87831-4821			N.A	N.A	N.A	3														
87831-4836			N.A	N.A	N.A	4														
87831-4828			N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES	2.50							
87831-4829		N.A	N.A	N.A	3															
B	50	87831-5019	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	48.00	50.85	52.65	51.00	44.00	N.A	2.50	3.60±0.20
		87831-5020	N.A	N.A	N.A	2														
		87831-5021	N.A	N.A	N.A	3														
		87831-5036	N.A	N.A	N.A	4														
		87831-5028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50	
		87831-5029	N.A	N.A	N.A	3														
	87831-5035	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES	3.50								
A	PLATING OPTIONS:																			
	1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
	2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
	3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																			
	4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																			
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
	DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#512581.				molex											
	mm		NTS																	
	GENERAL TOLERANCES (UNLESS SPECIFIED)																			
	MM		INCH																	
4 PLACES	±		±	EC NO: 761863 DRWN: SUAIFR CHK'D: GGA APPR: GGA 2023/08/14 2023/09/11 2023/09/11				MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER												
3 PLACES	±		±																	
2 PLACES	±	0.2	±																	
1 PLACE	±		±																	
0 PLACES	±		±	INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION								
ANGULAR TOL ± 3.0 °				DRWN: GMENARLY APPR: KHLIM 2015/04/15 2015/06/29				SD-87831-0001		PSD	001	A24								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER								
						A3-SIZE	87831	SEE TABLE		GENERAL MARKET		13 OF 14								
DOCUMENT STATUS		P1	RELEASE DATE	2023/09/11	04:36:51															
10		9		8		7		6		5		4		3		2		1		

BOARD TO BOARD (BTB) DISTANCE

HEADER	MATES WITH (RECEPTACLE)	BTB DIST.	PICTORIAL VIEW
87831	79107	6.94	
	78787	6.94	
	79108	6.94	
	79109	7.15	
	78788	7.15	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	±	±
3 PLACES	±	±
2 PLACES	± 0.2	±
1 PLACE	±	±
0 PLACES	±	±
ANGULAR TOL	± 3.0 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

CURRENT REV DESC: REMOVED OBSOLETE PART
NUMBERS AS PER PCN#512581.

EC NO: 761863

DRWN: SUAIFR

CHK'D: GGA

APPR: GGA

2023/08/14

2023/09/11

2023/09/11

INITIAL REVISION:

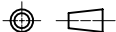
DRWN: DRWN BY

APPR: APPR BY

XXXX/XX/XX

XXXX/XX/XX

THIRD ANGLE PROJECTION



DRAWING

SERIES

A3-SIZE

87831

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A24

PRODUCT CUSTOMER DRAWING

GENERAL MARKET

SHEET NUMBER

14 OF 14

DOCUMENT STATUS

P1

RELEASE DATE

2023/09/11 04:36:51

FORMAT: Mtl-lega-master-ib-prod-A3
REVISION: E1
DATE: 2021/05/01